

## INSTRUCTIONS FOR TABLE 6.4

### CANCER TOXICITY DATA - EXTERNAL (RADIATION)

<b>PURPOSE OF THE TABLE:</b> <ul style="list-style-type: none"> <li>To provide cancer toxicity information for radionuclides.</li> </ul>	
<b>INFORMATION DOCUMENTED:</b> <ul style="list-style-type: none"> <li>Cancer toxicity information (values and units) for radionuclides.</li> <li>The source and date of the toxicity information.</li> </ul>	
<b>GENERAL NOTES/INSTRUCTIONS FOR THIS TABLE:</b> <ul style="list-style-type: none"> <li>Table 6.4 does not replace toxicological profiles for the individual radionuclides that will be presented in the risk assessment.</li> </ul>	<i>It may be necessary to refer to RAGS, the risk assessment technical approach, and the EPA risk assessor to complete the table.</i>
<b>HOW TO COMPLETE/INTERPRET THE TABLE</b>	
<b>Column 1 - Chemical of Potential Concern</b>	
<b>Definition:</b> <ul style="list-style-type: none"> <li>Radionuclides that are potentially site-related, with data of sufficient quality, that have been retained for quantitative analysis as a result of the screening documented in Table 2.</li> </ul>	
<b>Instructions:</b> <ul style="list-style-type: none"> <li>Enter the names of the radionuclides that were selected as COPCs from Table 2.</li> </ul>	<i>Radionuclides may be grouped in the order that the risk assessor chooses.</i>
<b>Column 2 - Cancer Slope Factor Value</b>	
<b>Definition:</b> <ul style="list-style-type: none"> <li>A Cancer Slope Factor is an age-averaged lifetime excess cancer incidence rate per unit intake (or unit exposure for external exposure pathways) and is used to convert the intake to a cancer risk. Ingestion and inhalation slope factors are central estimates in a linear model of the age-averaged, lifetime attributable radiation cancer incidence (fatal and nonfatal cancer) risk per unity of activity inhaled or ingested, expressed as risk/picocurie (pCi). External exposure slope factors are central estimates of the lifetime attributable radiation cancer incidence risk for each year of exposure to external radiation from photon-emitting radionuclides distributed uniformly in a thick layer of soil, and are expressed as risk/yr per pCi/gram of soil.</li> </ul>	

## INSTRUCTIONS FOR TABLE 6.4

### CANCER TOXICITY DATA - EXTERNAL (RADIATION) (continued)

<p>Instructions:</p> <ul style="list-style-type: none"> <li>Enter the value of the cancer slope factor for each COPC.</li> </ul>	
<b>Column 3 - Cancer Slope Factor Units</b>	
<p>Definition:</p> <ul style="list-style-type: none"> <li>The units associated with the Cancer Slope Factor value.</li> </ul>	
<p>Instructions:</p> <ul style="list-style-type: none"> <li>Enter the units for the Cancer Slope Factor value.</li> </ul>	<i>Consult the EPA risk assessor to determine if there is a preference regarding the units to be used.</i>
<b>Column 4 -Source(s)</b>	
<p>Definition:</p> <ul style="list-style-type: none"> <li>A reference for the cancer slope or conversion factor value.</li> </ul>	
<p>Instructions:</p> <ul style="list-style-type: none"> <li>Enter the reference(s) for the cancer slope or conversion factor value. Use a colon to delineate multiple sources.</li> </ul>	<p><i>For example:</i></p> <p><b>IRIS</b>  <b>HEAST</b>  <b>NCEA</b>  <b>OTHER</b></p>
<b>Column 5 - Date(s) (MM/DD/YYYY)</b>	
<p>Definition:</p> <ul style="list-style-type: none"> <li>The date of the document that was consulted for the cancer slope or conversion factor value in the MM/DD/YYYY format.</li> </ul>	
<p>Instructions:</p> <ul style="list-style-type: none"> <li>Enter the date in MM/DD/YYYY format. Use a colon to delineate between multiple dates, if multiple sources of information were used.</li> <li><i>For IRIS references, provide the date IRIS was searched.</i></li> <li><i>For HEAST references, provide the date of the HEAST reference.</i></li> <li><i>For NCEA references, provide the date of the information provided by NCEA.</i></li> </ul>	<p><i>For example, the MM/DD/YYYY version of the date March 30, 1995 is 03/30/1995.</i></p>